



[6001.1189]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Re: Application of: Serge LANVIN, et al.
Serial No.: 09/994,394
Filed: November 26, 2001
For: A DEVICE FOR PERFORATING MATERIAL WEBS
Art Unit: 3724
Examiner: Issac N. Hamilton

Mail Stop: APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

April 19, 2007

APPELLANTS' BRIEF UNDER 37 C.F.R. § 41.37

Sir:

Appellants submit this brief for the consideration of the Board of Patent Appeals and Interferences (the "Board") in support of their appeal of the Advisory Action dated January 23, 2007 and the Final Rejection dated July 19, 2006 in this application. The statutory fee of \$500.00 is concurrently herewith. If any additional fees are deemed to be due at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

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1. REAL PARTY IN INTEREST

The real party in interest is Goss International Montataire S.A., a French corporation having a place of business in, Montataire, France, the assignee of the entire right, title and interest in the above-identified patent application. The invention was assigned to Goss International Montataire S.A. by a chain of assignments originating from inventors Lanvin and Robert. The most recent assignment was recorded on October 20, 2004 at reel 015896, frame 0777.

2. RELATED APPEALS AND INTERFERENCES

Appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

3. STATUS OF CLAIMS

Claims 1 to 19 are pending. Claims 1 to 19 have been finally rejected as per the Final Office Action dated July 19, 2006.

The rejection to claims 1 to 19 thus is appealed. A copy of appealed claims 1 to 19 is attached hereto as Appendix A.

4. STATUS OF AMENDMENTS

In response to the Final Office Action dated July 19, 2006, claim 15 was amended to correct an informality. The Advisory Action states the amendment has been entered.

A Notice of Appeal was filed on January 18, 2007, and received by the U.S.P.T.O. on January 22, 2007.

5. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1 recites a perforating tool (e.g., 15 in Fig. 3, see, e.g., specification at page 8, lines 7 to 8) for perforating single or multiple layer material webs or sheets (e.g. 1, see, e.g., specification at page 7, lines 8 to 10) separated therefrom, the perforating tool (e.g., 15 in Fig. 3, see, e.g., specification at page 8, lines 7 to 8) comprising: a first section (e.g., 16 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) having a plurality of perforating teeth (e.g., 28 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) and a perforation-free gap (e.g., 18 in Fig. 3, see, e.g., specification at page 8, lines 18 to 19); and a second section (e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) having a cutting zone (e.g., 19 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) and at least one group of perforating elements (e.g., 22 in Fig. 3, see, e.g., specification at page 8, lines 26 to 28) in alternating sequential fashion, the perforating elements (e.g., 22 in Fig. 3, see, e.g., specification at page 8, lines 26 to 28) being angled with respect to a longitudinal axis of the second section (e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26); the first section (e.g., 16 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) being adjacent the second section (e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) at a center line (e.g., 29 in Fig. 5.1), the perforation-free gap (e.g., 18 in Fig. 3, see, e.g., specification at page 8, lines 18 to 19) of the first section extending from the fold center line (e.g., 29 in Fig. 5.1) to the plurality of perforating teeth (e.g., 28 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13).

Independent claim 14 recites a perforating device in a folding apparatus arranged downstream of a web-processing rotary printing machine, the perforating device comprising: a perforating tool (e.g., 15 in Fig. 3, see, e.g., specification at page 8, lines 7 to 8) for perforating single or multiple layer material webs or sheets (e.g. 1, see, e.g., specification at page 7, lines 8 to 10) separated therefrom, the perforating tool (e.g., 15 in Fig. 3, see, e.g., specification at page 8, lines 7 to 8) including a first section (e.g., 16 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) having a plurality of perforating teeth (e.g., 28 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) and a perforation-free gap (e.g., 18 in Fig. 3, see, e.g., specification at page 8, lines 18 to 19); and a second section (e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) having a cutting zone (e.g., 19 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) and at least one group of perforating elements (e.g., 22 in Fig. 3, see, e.g., specification at page 8, lines

26 to 28) in alternating sequential fashion, the perforating elements (e.g., 22 in Fig. 3, see, e.g., specification at page 8, lines 26 to 28) being angled with respect to a longitudinal axis of the second section e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26); the first section (e.g., 16 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) being adjacent the second section (e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) at a center line e.g., 29 in Fig. 5.1), the perforation-free gap e.g., 18 in Fig. 3, see, e.g., specification at page 8, lines 18 to 19) of the first section (e.g., 16 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) extending from the center line (e.g., 29 in Fig. 5.1) to the plurality of perforating teeth e.g., 28 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13).

Independent claim 15 recites a perforating tool (e.g., 15 in Fig. 3, see, e.g., specification at page 8, lines 7 to 8) for perforating single or multiple layer material webs or sheets (e.g. 1, see, e.g., specification at page 7, lines 8 to 10) separated therefrom, the perforating tool (e.g., 15 in Fig. 3, see, e.g., specification at page 8, lines 7 to 8) comprising: a first section (e.g., 16 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) having a plurality of perforating teeth (e.g., 28 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) and a perforation-free gap (e.g., 18 in Fig. 3, see, e.g., specification at page 8, lines 18 to 19); and a second section (e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) having a cutting zone (e.g., 19 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) and a plurality of perforating elements (e.g., 22 in Fig. 3, see, e.g., specification at page 8, lines 26 to 28) angled with respect to the perforating tool (e.g., 15 in Fig. 3, see, e.g., specification at page 8, lines 7 to 8) and arranged in the second section (e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) in sequential rows; the first section (e.g., 16 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) being adjacent the second section (e.g., 17 in Fig. 3, see, e.g., specification at page 8, lines 25 to 26) so as to define a center_line (e.g., 29 in Fig. 5.1), the perforation-free gap (e.g., 18 in Fig. 3, see, e.g., specification at page 8, lines 18 to 19) of the first section (e.g., 16 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13) extending from the center line (e.g., 29 in Fig. 5.1) to the plurality of perforating teeth (e.g., 28 in Fig. 3, see, e.g., specification at page 8, lines 10 to 13).

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1 to 6 and 8 to 19 should be rejected under 35 U.S.C. § 102(b) as being anticipated by Foster et al. (U.S. Patent No. 5,524,930). Whether claim 7 should be rejected under 35 U.S.C. §103(a) as being unpatentable over Foster in view of Wadzinski (U.S. Patent No. 5,146,829). Whether claims 1 to 6 and 8 to 19 should be rejected under 35 U.S.C. §103(a) as being unpatentable over Ganneval (FR2,782, 504A1) in view of Foster. Whether claim 7 should be rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Ganneval and Foster, and in further view of Wadzinski.

7. ARGUMENTS

Rejections under 35 U.S.C. §102(b)

Claims 1 to 6 and 8 to 19 were rejected under 35 U.S.C. §102(b) as being anticipated by Foster et al. (U.S. Patent No. 5,524,930).

Foster shows a midpoint 18 for creating a fold center line. One longitudinal edge 14 is used for the formation of a single longitudinal straight cutting edge 16 located generally at the approximate center mid-point 18 of unitary blade body 12. The center mid-point 18 can be several inches from the mathematical center of blade body 12. (See col. 2, lines 51 to 56). Foster also discloses a fold line 26 and a chopper fold 34.

Claim 1 recites a perforating tool for perforating single or multiple layer material webs or sheets separated therefrom, the perforating tool comprising:

- a first section having a plurality of perforating teeth and a perforation-free gap; and
 - a second section having a cutting zone and at least one group of perforating elements in alternating sequential fashion, the perforating elements being angled with respect to a longitudinal axis of the second section;
- the first section being adjacent the second section at a center line, the perforation-free gap of the first section extending from the center line to the plurality of perforating teeth.

The Office Action identifies point 18 as the midpoint and 16 as the cutting zone then identifies the centerline as the cutting edge of element 16. The cutting edge of element 16 is not the center line of the Foster device as that term is defined by the present invention and

specification, the center line for the fold. (See Figs. 3 and 4). The device in Foster goes through midpoint 18 providing center cut 19. Center cut 19 is parallel with fold line 26 and perforates both sides of chopper fold 34. (See Figure 4). Thus, Foster does not teach or disclose a “perforation-free gap of the first section extending from the center line to the plurality of perforating teeth.”

Moreover, the rejection is inconsistent as it defines the first section to the right of midpoint 18, and the second section to the left side of midpoint 18.

Foster thus does not meet the limitation of “the first section being adjacent the second section at a center line” if the center line is not at midpoint 18. Moreover, there is absolutely no support for the assertion that “centerline is cutting edge of element 16,” which is the center of the tool as recited in Col.2, Lines 51 to 54, of Foster. This section states “depending on the printing needs, the center mid-point 18 can be several inches from the mathematical center of the blade body.” *But this disclosure in no way discloses that the cutting edge of element 16 is exactly at the center of the tool, and certainly does not provide the basis for an anticipation rejection.*

Claims 14 and 15 have a similar limitation.

Claim 5 Argued Separately

With regard to claim 5, claim 5 recites that the angle of the perforating elements is 30°.

Foster discloses that its teeth are angled from 10 to 40 degrees. See column 4, lines 19 and 20. However, within this wide range Foster does not teach or disclose the species of a 30 degree angle, which has particular advantages for the present invention as stated at [0012]. The limitation is clearly not anticipated, nor obvious. There is no teaching or motivation to provide this degree angle to Foster.

Claim 6 Argued Separately

With regard to claim 6, claim 6 recites the at least one group of the perforating elements includes two groups and the second section further includes cutting segments, in alternating sequential fashion, between the groups.

Foster does not disclose “alternating sequential fashion between groups,” as claimed.

Withdrawal of the rejection to claim 6 for this reason as well is respectfully requested.

Claim 13 Argued Separately

With regard to claim 13, claim 13 recites the “the length of the first section and a length of the second section are the same.”

The Final Office Action states that the lengths of the sections in Foster in Fig. 3 are the same. However, this is not shown at all in Fig. 3, as the full sections are not even shown, but rather only a partial view is shown. ***If the centerline is cutting edge of element 16 as asserted, the first section and second section are not the same length.***

Withdrawal of the rejection to claim 13 is respectfully requested.

Claim 16 Argued Separately

With regard to claim 16, claim 16 recites “the center line is located at the center of the tool.”

As discussed above, the Office Action identifies 16 as the cutting zone then identifies the centerline as the cutting edge of element 16. ***The cutting edge of element 16 is not the center line of the Foster device as that term is defined by the present invention and specification, the center line for the fold. (See Figs. 3 and 4).***

Withdrawal of the rejection to claim 16 is respectfully requested.

Claim 17 Argued Separately

With regards to claim 17, claim 17 recites “the plurality of perforating teeth are separated by spaces, the perforation-free gap being wider then the spaces.”

Foster does not teach or show “the perforation free gap being wider then the spaces,” as claimed. The assertion in the Office Action to Figure 3 is not understood, as the spaces appear to be the same width.

Withdrawal of the rejection to claim 17 is respectfully requested.

Claim 19 Argued Separately

Claim 19 recites that the first section defines a first half of the tool and the second section defines a second half of the tool, the center line separating the first and second halves.

A half is defined as “one of two equal parts of a divisible whole.”

The first and second halves of Foster are split right down the center of blade 16, and thus the center line, of at an edge of blade 16 would not separate the first and second halves as claimed but fall into one of the first or second halves.

In other words, if Foster would be split at the edge of blade 16, instead of in the middle, the split parts would not be halves.

Again, the Office Action purposefully muddles what is the center line. Is it midpoint 18 or the edge of the cutting zone 16?

Withdrawal of the rejection to claim 19 is respectfully requested.

Withdrawal of the rejection of claims 1 to 6 and 8 to 19 under 35 U.S.C. §102(b) is respectfully requested.

Rejections under 35 U.S.C §103(a)

Ganneval in view of Foster

Claims 1 to 6 and 8 to 19 should be rejected under 35 U.S.C. §103(a) as being unpatentable over Ganneval (FR2,782, 504A1) in view of Foster.

Ganneval discloses a folder for longitudinally folding and cutting a web of material.

Foster is discussed above.

To the extent the Office Action is asserting that Fig. 4 meets the limitations of the present claims 1, 14 and 15, it is noted that section 21 (similar to 41 in ‘692 patent) is linear and is formed together so that the parts are not angled. It is respectfully submitted that one of skill in the art would not have angled such a solid section, especially in view of Foster which requires discrete sections to provide angling. Moreover there is no teaching or motivation to only angle one section without the other. **The motivation provided “to enable the workpiece to *twist more easily*,” is not understood. Why would anyone of skill in the art want a workpiece to twist easily?**

Claim 4 Argued Separately

With regards to claim 4, claim 4 recites the perforating elements of the group are angled in relation to the axis at an angle of between 20 degrees and 40 degrees.

Ganneval fails to disclose “perforating elements of the group are angled in relation to the axis at an angle of between 20 degrees and 40 degrees.” It would not have been obvious to one skilled in the art to combine Ganneval and Foster. Furthermore there is no motivation to modify Ganneval in view of Foster.

Withdrawal of the rejection of claim 4 is respectfully requested.

Claim 5 Argued Separately

With regard to claim 5, claim 5 recites that the angle of the perforating elements is 30°.

Ganneval fails to disclose “the angle of the perforating elements is 30 degrees.” As discussed above, Foster also does not teach or disclose the species of a 30 degree angle. The limitation is clearly not anticipated, nor obvious. There is no teaching or motivation to provide this degree angle to Ganneval or Foster.

Withdrawal of claim 5 is respectfully requested.

Claim 7 Argued Separately

With regard to claim 7, claim 7 recites the perforating elements at a front edge and at a rear edge are symmetrically angled with respect to the axis.

Ganneval does not disclose any angles with respect to the axis. It would not have been obvious to one skilled in the art to combine Ganneval and Foster. Furthermore there is no motivation to modify Ganneval in view of Foster.

Withdrawal of the rejection to claim 7 for this reason as well is respectfully requested.

Claim 8 Argued Separately

With regard to claim 8, claim 8 recites “the perforating elements at a rear edge are angled on one side with respect to the axis.”

Ganneval does not disclose any angles with respect to the axis. It would not have been obvious to one skilled in the art to combine Ganneval and Foster. Furthermore there is no motivation to modify Ganneval in view of Foster.

Withdrawal of the rejection to claim 8 for this reason as well is respectfully requested.

Claim 9 Argued Separately

With regard to claim 9, claim 9 recites “the perforating elements at a front edge are inclined with respect to the axis.”

Ganneval does not disclose any angles with respect to the axis. It would not have been obvious to one skilled in the art to combine Ganneval and Foster. Furthermore there is no motivation to modify Ganneval in view of Foster.

Withdrawal of the rejection to claim 9 for this reason as well is respectfully requested.

Claim 11 Argued Separately

With regard to claim 11, claim 11 recites the “perforating elements of the at least one group of perforating elements are separated by slit shape openings.”

Ganneval does not disclose slit shape openings. It would not have been obvious to one skilled in the art to combine Ganneval and Foster. Furthermore there is no motivation to modify Ganneval in view of Foster.

Withdrawal of the rejection to claim 11 for this reason as well is respectfully requested.

Claim 16 Argued Separately

With regard to claim 16, claim 16 recites “the center line is located at the center of the tool.”

Ganneval has a central position that can be displaced, and not the center line located at the center of the tool. (Col. 9, Lines 26 to 32).

Withdrawal of claim 16 is respectfully requested.

Claim 17 Argued Separately

With regards to claim 17, claim 17 recites “the plurality of perforating teeth are separated by spaces, the perforation-free gap being wider than the spaces.”

Neither Ganneval nor Foster teaches or shows “the perforation free gap being wider than the spaces,” as claimed.

Withdrawal of claim 17 is respectfully requested.

Withdrawal of the rejection of claims 1 to 6 and 8 to 19 under 35 U.S.C. §103(a) is respectfully requested.

Ganneval and Foster in further view of Wadzinski

Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Ganneval and Foster as applied to claims 1 to 6 and 8 to 19, and in further view of Wadzinski.

In addition of the above, there is no proper motivation to combine Wadzinski with Ganneval and Foster. The proposed motivation is not understood.

Withdrawal of the rejection to the claim 7 under 35 U.S.C. 103(a) is respectfully requested.

CONCLUSION

It is respectfully submitted that the application is in condition for allowance. Favorable consideration of this appeal brief is respectfully requested.

Respectfully submitted,

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APPENDIX A:

PENDING CLAIMS 1 to 19 OF U.S.
APPLICATION SERIAL NO. 09/994,394

Claim 1 (previously presented): A perforating tool for perforating single or multiple layer material webs or sheets separated therefrom, the perforating tool comprising:

- a first section having a plurality of perforating teeth and a perforation-free gap; and
 - a second section having a cutting zone and at least one group of perforating elements in alternating sequential fashion, the perforating elements being angled with respect to a longitudinal axis of the second section;
- the first section being adjacent the second section at a center line, the perforation-free gap of the first section extending from the center line to the plurality of perforating teeth.

Claim 2 (previously presented): The perforating tool as recited in claim 1 wherein the perforation-free gap of the first section borders on the cutting zone of the second section.

Claim 3 (previously presented): The perforating tool as recited in claim 1 wherein the cutting zone borders, on one side, on the perforation-free gap and, on the other side, on the group of perforating elements.

Claim 4 (original): The perforating tool as recited in claim 1 wherein the perforating elements of the group are angled in relation to the axis at an angle of between 20° and 40°.

Claim 5 (original): The perforating tool as recited in claim 4 wherein the angle is 30°.

Claim 6 (previously presented): The perforating tool as recited in claim 1 wherein the at least one group includes two groups and the second section further includes cutting segments, in alternating sequential fashion, between the groups.

Claim 7 (previously presented): The perforating tool as recited in claim 1 wherein the perforating elements at a front edge and at a rear edge are symmetrically angled with respect to the axis.

Claim 8 (original): The perforating tool as recited in claim 1 wherein the perforating elements at a rear edge are angled on one side with respect to the axis.

Claim 9 (original): The perforating tool as recited in claim 1 wherein the perforating elements at a front edge are inclined with respect to the axis.

Claim 10 (previously presented): The perforating tool as recited in claim 1 wherein the perforating elements are configured as perforating tongues.

Claim 11 (previously presented): The perforating tool as recited in claim 10 wherein the perforating elements of the at least one group of perforating elements are separated by slit-shaped openings.

Claim 12 (previously presented): The perforating tool as recited in claim 1 wherein the perforating elements of the at least one group of perforating elements have a slanted surface at tips of the perforating elements.

Claim 13 (original): The perforating tool as recited in claim 1 wherein a length of the first section and a length of the second section are the same.

Claim 14 (previously presented): A perforating device in a folding apparatus arranged downstream of a web-processing rotary printing machine, the perforating device comprising: a perforating tool for perforating single or multiple layer material webs or sheets separated therefrom, the perforating tool including a first section having a plurality of perforating teeth and a perforation-free gap; and a second section having a cutting zone and at least one group of perforating elements in alternating sequential fashion, the perforating elements being angled with respect to a longitudinal axis of the second section; the first section being adjacent the second section at a center line, the perforation-free gap of the first section extending from the center line to the plurality of perforating teeth.

Claim 15 (previously presented): A perforating tool for perforating single or multiple layer material webs or sheets separated therefrom, the perforating tool comprising:

- a first section having a plurality of perforating teeth and a perforation-free gap; and
- a second section having a cutting zone and a plurality of perforating elements angled with respect to the perforating tool and arranged in the second section in sequential rows;

the first section being adjacent the second section so as to define a center line, the perforation-free gap of the first section extending from the center line to the plurality of perforating teeth.

Claim 16 (previously presented): The perforating tool as recited in claim 1 wherein the center line is located at the center of the tool.

Claim 17 (previously presented): The perforating tool as recited in claim 1 wherein the plurality of perforating teeth are separated by spaces, the perforation-free gap being wider than the spaces.

Claim 18 (previously presented): The perforating tool as recited in claim 1 wherein the cutting zone borders the perforation-free gap at the center line.

Claim 19 (previously presented): The perforating tool as recited in claim 1 wherein the first section defines a first half of the tool and the second section defines a second half of the tool, the center line separating the first and second halves.

APPENDIX B

Evidence Appendix under 37 C.F.R. §41.37(c)(ix):

No evidence pursuant to 37 C.F.R. §§1.130, 1.131 or 1.132 and relied upon in the appeal has been submitted by appellants or entered by the examiner.

APPENDIX C

Related proceedings appendix under 37 C.F.R. §41.37(c)(x):

As stated in “2. RELATED APPEALS AND INTERFERENCES” of this appeal brief, appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board’s decision in this appeal.